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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/522,044	01/19/2005	Peter Drott	PCT10483US	3988
23122	7590	07/13/2007	EXAMINER	
RATNERPRESTIA			LEE, GILBERT Y	
P O BOX 980			ART UNIT	
VALLEY FORGE, PA 19482-0980			PAPER NUMBER	
			3673	
			MAIL DATE	
			DELIVERY MODE	
			07/13/2007	
			PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<p align="center">Office Action Summary</p>	<p>Application No.</p> <p align="center">10/522,044</p>	<p>Applicant(s)</p> <p align="center">DROTT ET AL.</p>	
	<p>Examiner</p> <p align="center">Gilbert Y. Lee</p>	<p>Art Unit</p> <p align="center">3673</p>	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 April 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15-20 and 22-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 15-20 and 22-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 April 2007 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

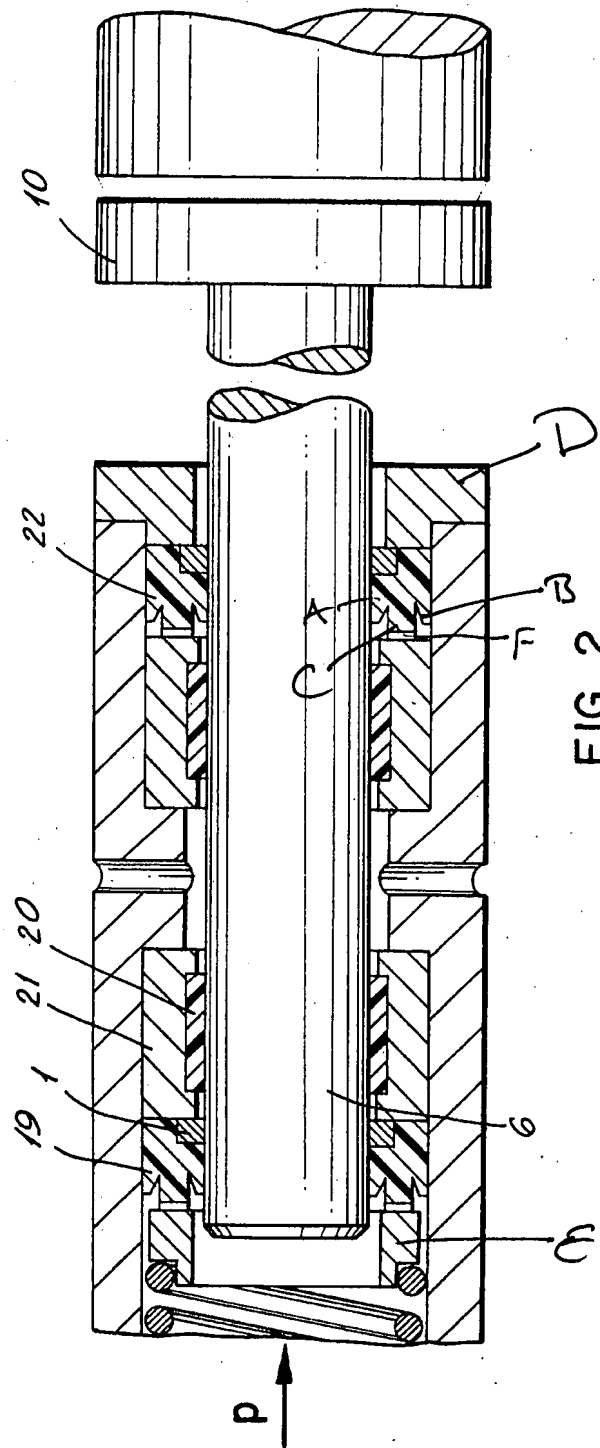
Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input checked="" type="checkbox"/> Other: <u>Examiner's Attachment 1</u> . |

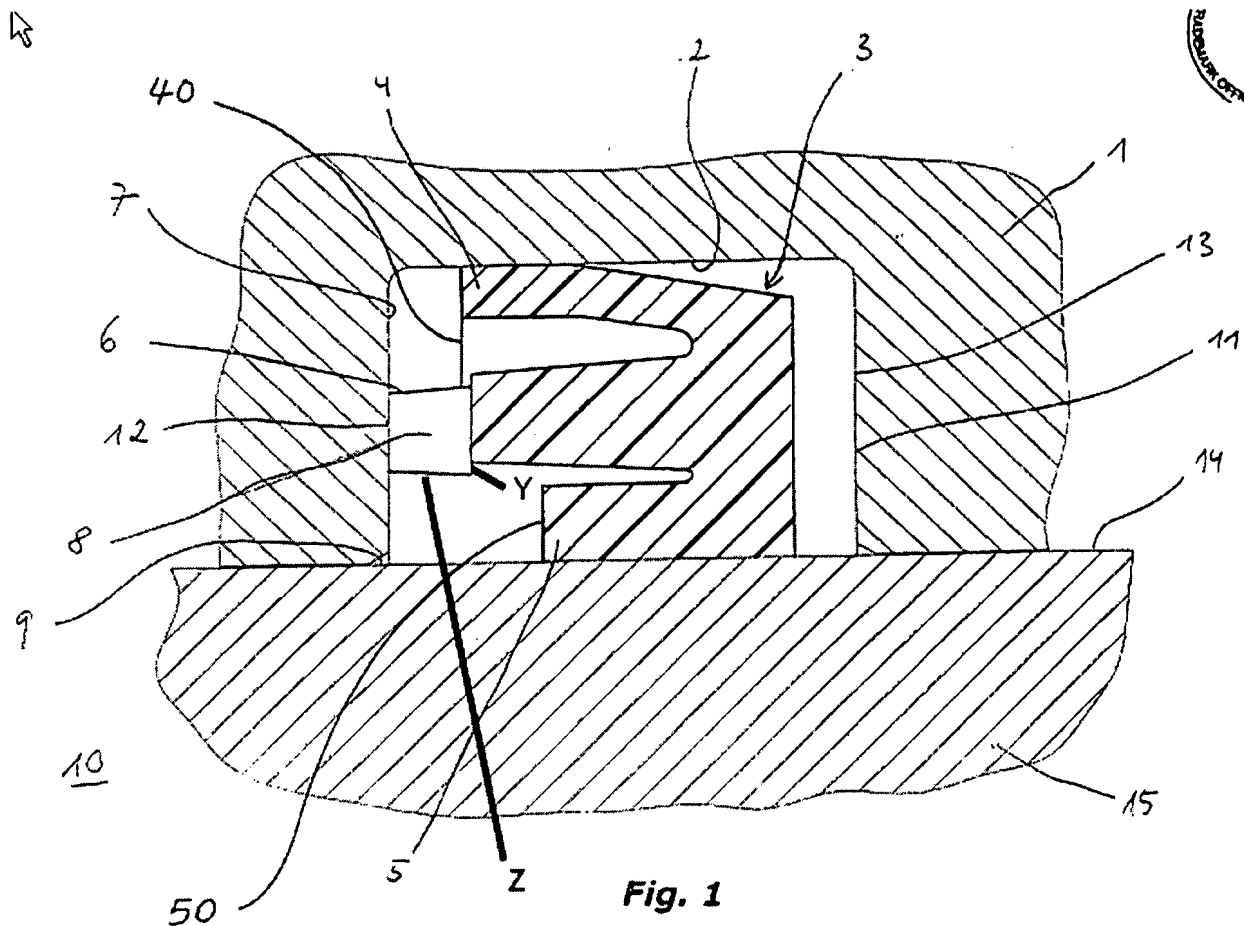


DETAILED ACTION

1. The amendment filed 4/17/07 has been entered.

Drawings

2. The drawings are objected to because the radial apertures are not shown in detail. It is understood that Fig. 1 is showing a circular geometry for outer lip 4; however, if Fig. 1 is showing a circular geometry for outer lip 4, then it must show a circular geometry for the rest of the sealing collar. Lines Y and Z seem to make Fig. 1 show a flat cross-sectional view of an extension 6 with an aperture and block offset from the extension with an aperture in the background; however, this is not known because of lines Y and Z. In no way does the extension 6 seem to be a circular geometry, corresponding to the circular geometry of outer lip 4, or the part labeled 8 to be part of extension 6.



If Fig. 1 is to show a complete circular geometry, lines Y and Z should be deleted from the figure to correspond with the circular geometry of the outer lip. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief

description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

For reference characters A-F refer to the Examiner's Attachment 1.

3. Claims 15-20 and 22-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Zollner (US Patent No. 4,602,791).

Regarding claim 15, the Zollner reference, as best understood, discloses a cylinder-and-piston unit (Col. 1, Lines 5-15) comprising a cylinder (5), a piston (6) and a sealing collar (19 or 22), the sealing collar inserted in a groove (e.g. groove of element 5 containing elements 19 and 21 or elements 21 and 22) that is recess in an interior wall surface of the cylinder and comprising an outside sealing lip (B) and an inside sealing lip (A), the outside and inside sealing lips each having a free end (i.e. the ends facing

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downwards in Fig. 2), the sealing collar further including a circumferential extension (C) that extends in parallel to the sealing lips (Fig. 2), is arranged radially between the outside sealing lip and the inside sealing lip and projects axially beyond the free ends of the outside and inside sealing lips (Fig. 2), the circumferential extension being configured to contact a side wall (e.g. wall of element E in contact with element 19 or wall of element 21 in contact with element 22) in the groove (Fig. 2) and maintain the free ends of the outside and inside sealing lips out of contact with the sidewall (Fig. 2).

Regarding claim 16, the Zollner reference, as best understood, discloses a cylinder-and-piston unit (Col. 1, Lines 5-15) comprising a cylinder (5), a piston (6) and a sealing collar (19 or 22), the sealing collar received in a groove (e.g. groove of elements 5 and E containing elements 19 and 21 or groove made by elements 5, 21 and D containing element 22) that is recessed in an interior wall surface (i.e. surface of element 5 in contact with B) of the cylinder, the sealing collar comprising a first sealing lip (A) and a second sealing lip (B), the first sealing lip being acted upon dynamically and making contact with the piston (Fig. 2) and the second sealing lip thereof being acted upon statically while resting on a bottom of the groove (Fig. 2), the first and second sealing lips each having a free end (i.e. the ends facing downwards in Fig. 2), the sealing collar further including a circumferential extension (C) that extends between the first and second sealing lips (Fig. 2), and projects from the first and second sealing lips in an axial direction beyond the free ends of the first and second sealing lips (Fig. 2), the sealing collar having a rear surface (e.g. surface of elements 19 or 22 in contact with elements 21 or D respectively) opposite the free ends of the first and second

sealing lips, wherein the sealing collar has a maximum radial width at the free end of the second sealing lip and a minimum radial width at the rear surface (Fig. 2). Note that the radial width at the rear surface will always be smaller than the maximum width because of supporting ring 1.

Regarding claim 17, the Zollner reference, as best understood, discloses the axial width of the groove (e.g. groove of elements 5 and E containing elements 19 and 21 or groove made by elements 5, 21 and D containing element 22) being larger than the axial width of the sealing collar (i.e. from the rear surface of element 19 or 22 to the tip of the extension C in contact with E and 21 respectively).

Regarding claim 18, the Zollner reference, as best understood, discloses the second sealing lip (B). Note that the second lip of the Zollner reference is capable of being passed over by pressure fluid flow and hence provide the effect of a valve, because the structure as claimed in claim 16 is the same as the structure of the Zollner reference.

Regarding claim 19, the Zollner reference, as best understood, discloses the strength of the extension as a difference between its inside and outside diameters has at least the same rate as the strength of each of the sealing lips. Note that the seal of the Zollner reference is made of one material and since the extension has a thicker diameter, it will have a strength that is equal, if not greater, than the strength of the lips.

Regarding claim 20, the Zollner reference, as best understood, discloses the extension being provided with radial apertures (F). Note that the apertures are capable of allowing pressure fluid to pass through in a radial direction.

Regarding claim 22, the Zollner reference, as best understood, discloses the apertures being open in an axial direction towards the free end of the extension (Fig. 2).

Regarding claim 23, the Zollner reference, as best understood, discloses the extension being integrally connected to the sealing collar and being made of the same material (Fig. 2).

Regarding claim 24, the Zollner reference, as best understood, discloses a cylinder-and-piston unit (Col. 1, Lines 5-15) comprising a cylinder (5), a piston (6) and a sealing collar (19 or 22), the sealing collar received in a groove (e.g. groove of element 5 containing elements 19 and 21 or elements 21 and 22) that is recessed in an interior wall surface (i.e. surface of element 5 in contact with B) of the cylinder, the sealing collar comprising an outside sealing lip (B) and an inside sealing lip (A), the outside and inside sealing lips each having a free end (i.e. the ends facing downwards in Fig. 2), the sealing collar further including a circumferential extension (C) that extends in parallel to the sealing lips (Fig. 2), is arranged radially between the outside sealing lip and the inside sealing lip and has a free end that projects axially beyond the free ends of the outside and inside sealing lips (Fig. 2), the circumferential extension engaging a side wall (e.g. wall of element E in contact with element 19 or wall of element 21 in contact with element 22) in the groove (Fig. 2) and maintaining the free ends of the outside and inside sealing lips out of contact with the sidewall (Fig. 2).

Regarding claim 25, the Zollner reference, as best understood, discloses the free end of the circumferential extension being provided with radial apertures (F). Note that

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the apertures are **capable of** allowing pressure fluid to pass through in a radial direction.

Regarding claim 26, the Zollner reference, as best understood, discloses the sealing collar having a rear surface (e.g. surface of element 19 or 22 in contact with element 1 that is parallel to the surface of element C in contact with element E or 21 respectively) opposite the free ends of the outside and inside sealing lips, wherein the sealing collar has a maximum outside diameter at the free end of the outside sealing lip and a minimum outside diameter at the rear surface (Fig. 2). Note the minimum outside diameter is the same width as the supporting ring 1 and will always be smaller than the maximum diameter at the outside seal.

Response to Arguments

4. With regards to the applicant's arguments of the drawing objections, the arguments are not persuasive. The applicant argues that Fig. 1 depicts a circular geometry, however, this is only depicted for outer lip 4 and not for extension 6 (with/without the aperture). As stated in the rejection above, the lines Y and Z seem to contradict the depiction of a circular geometry. As best understood, Fig. 1 seems to show half of the sealing collar in a circular geometry and the other half in a flat cross sectional view.

5. The 35 U.S.C. 112 rejections have been cancelled.

6. With regards to the applicant's argument of the groove of the Zollner reference, the argument is not persuasive because, as clearly stated in the prior office action, the cylinder is being considered as element 5. The definition of a "groove" being used, as stated in the Webster's II New Riverside Dictionary, is : a long, narrow furrow or channel. Element 22 clearly sits in a groove/recess of element 5. Clearly there are grooves on either side of element 23.

7. With regards to the applicant's argument of the circular geometry of the sealing collar, the argument is not persuasive because the drawing seems to depict both a circular geometry and a flat cross-sectional view in the same figure. It is understood that a sealing collar is circular, however, the circular geometry must be shown in the whole figure and not only for certain parts.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

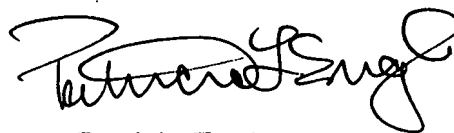
the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gilbert Y. Lee whose telephone number is 571-272-5894. The examiner can normally be reached on 8:00 - 4:30, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patricia L. Engle can be reached on (571)272-6660. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

GL
July 5, 2007

A handwritten signature in black ink, appearing to read 'Patricia Engle', with a stylized flourish at the end.

Patricia Engle
Supervisory Examiner
Tech. Center 3600